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TELEPHONE

Rapid City flood claims telephone man

TELEPHONE DIALERS AND

PHONE PEAK WHISTLES TO AUSTRALIA - FINED \$1000

SYSTEM PRACTICES

THE COMPLETE TELEPHONE INFORMATION CENTER

- How to handle obscene telephone company employees
- How to get the best from your telephone
- How many attachments can you wire to your telephone line?
- What you can get for a dime (which is refundable)
- how to call long distance toll-free

dialing direct, area codes, long distance rates
or something else about your telephone service?

JUST A NOTE....

You apparently are interested in what TEL has to offer or you wouldn't have responded to the advertisement that brought you what you are now reading. Starting in January—TEL will include a complete telephone engineering course in monthly chapters beginning with the basics; TEL will answer readers questions and publish letters with greatest potency; TEL will compile an information exchange from readers tips listing the phone company's test code numbers and routing now in use; TEL, among many other feature articles, will include in each issue Current News Items, Plans, Illustrations, Stories, History, Comics, Games, Projects, and the secrets Ma Bell's toll not.

Telephone Electronics Line is the only publication of its kind, revealing the demanding secrets of the nationwide telephone monopoly. TEL is supported entirely by each and every one of its subscribers and therefore contains absolutely no advertisements. If the TEL staff were to convince you to sell just one subscription to a friend, a neighbor, a relative, your employer or employee, a teacher, or just about anyone for that matter, you would be holding a booklet with twice as many pages and the knowledge of a dozen telephone company employees.

If you have not already signed up for a subscription or would like to give a friend a New Years present, you still have time to send in the form that appears on page 10 for the January issue. It's not too late to receive all the 1975 issues of Telephone Electronics Line—delivered to your door each and every month of the year by an authorized agent of the U. S. Government.

MERRY CHRISTMAS

Hoping this issue reaches you in good spirits, the staff of Telephone Electronics Line wishes its readers the greatest of a New Year and a Merry Christmas.

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Editorial

by Jack Kranyak
Educator Mary Harris had her students harass homophobes on the telephone, as if Peter Piper picked a peck of people numbers and punished them with a poor time.

The academic object was to discover whether innocent victims showed hostility with hostility, according to Behavior University of New Mexico Graduate student. Today we are instructed to make random wrong number phone calls, harass answers and then record results.

Petarded people lose patience, learned Ms. Harris, a funding any listed human being would have known without testing. Friend Burt Prejitsky admits as much in the same issue. Sometimes I think educators taking surveys on hostility and aggression raise the ambient levels of hostility and aggression simply by adding to the natural static abroad in our land.

Other observations of the obvious from the Albuquerque experiment were that victims gave male callers more lip than female, turning sourly sooner and cutting off the connection earlier. That's because males make more mischief on the telephone; who ever heard of an obscene caller with a soprano voice?

What the test didn't examine was the calling end of the interruption friendly hello. "Morris?" a voice may say, take, even an honest mistake, want to punish the innocent person on the receiving end?

I've had an extraordinary experience along these telephone lines because I have one phone reserved for business calls. When that phone rings during non-business hours, I'm almost most positive it's a wrong number call.

But to play it safe, I always play polite; I pick up the phone with a fairly friendly hello. "Morris?" a voice may say. "No," I'll answer, "no Morris here, you must have a wrong number."

Almost half the time the errant caller will then say, "Who is this?" And I will then say, who are you? Only idiots tell imperfect strangers their names.

The person who dialed the wrong number invariably becomes angry when I refuse to identify myself. Maybe the caller is angry at himself or herself for having lost a last dime, perhaps, or for have been handed a mistaken message. But the anger is turned outward, at me. As if I had no rights to privacy now that Morris the mystery isn't available.

The more polite Morris-seekers will ask, "What number is this?" And I usually say, sorry, its unlisted, because if the caller is a crank I don't want him cranking right back.

If educator Harris were really doing original research, she'd have students trying to figure out why people who dial wrong numbers take their frustrations out on wrong victims. Their behavior is the interesting, infantile response—like the small child who blames a table for being there when a baby stubs a toe on it.

People don't behave that poorly in face-to-face situations. Someone who mistakenly slaps someone else on the back apologizes profusely for imposing on the wrong party. Such a someone may be embarrassed—and afraid of a punch on the nose.

The telephone is different; it prevents physical aggression and permits anonymous aggression. The victim can't fight back, except verbally. So the first person to make a mistake makes matters worse by adding insult to interruptive injury. The telephone is a perfect disguise for breaking and entering.

Don't call me with your inquiries, Ms. Harris, and I won't call you. Morris don't live here anymore and I respond poorly to academic provocation.

How to handle obscene telephone company employees

By Donald Simmons

I have often found business office representatives are less than helpful in executing their duties. For instance, it was a complete chore to have different types of connecting arrangements such as a QKT Audio Coupler ordered for my telephone line. Some representatives didn't seem to know what I was talking about (lack of education in their field) while others seemed deliberately bent on causing problems for me. Once, I was told by a service representative that I could not have a single plug-and-jack arrangement. When I demanded to know the section, number, and page of the tariff which states this, he told me to hold on, appearing 15 minutes later to tell me that I could have the arrangement after all. Remember, if a telephone company representative tells you that you cannot do something, demand to know what tariff section stipulates it. Thus, you can verify it yourself by looking it up in the tariffs which must be made available for public inspection by your telephone company.

Many people express the fear that the telephone company "taps" or monitors their telephone conversations. For the most part, these fears are groundless, based mostly on plenty of telephone line static and an overactive imagination. If you really believe that you may be monitored, stop and ask yourself: "What reason would the Tel. Co. have to monitor me, which would be worth their time and trouble?" In most cases, no good reasons exist. It is true, however, that a number of cases of monitoring by Tel. Co. employees that were authorized neither by the courts nor by Tel. Co., one of which I was directly involved in.

In my case, I was speaking with a friend on a MMU call, when the line suddenly became disrupted. My side-tone balance was distorted and line loss increased considerably. Suddenly, I heard dial tone on the line, yet I was still connected with my party. Without hanging up the phone, I used my other line to dial a long number. The number associated with the test board in my central office checked if my switchman was causing the trouble (deliberate). My suspicions were confirmed when I was abruptly connected to my other line and could hear my friend speaking through test board.

When I called the switchman by dialing the switchroom number, the switchman admitted to monitoring my line, saying he had a court order (this was not so) and accused me of being a court pirate. He called me a few choice things which I shall not write here and threatened to come to my house and "do something about it personally".

I filed a formal complaint with the California State Public Utilities Commission which investigated the matter thoroughly. When they pressed for answers, the Pacific Telephone Company admitted that my line had been illegally monitored, but said that it was done by a switchman without their knowledge. Little more was done after this, however, had I wished to press charges, the Tel. Co.'s admission of the crime would have been as good as gold in gaining a conviction.

Another case involved a friend who works for Pacific Telephone. He said that the technicians in his office often ran connections from people's lines to a loudspeaker and listened in for entertainment. Though monitoring lines for repair purposes is legal, this practice hardly strikes me as a part of maintenance.

If you have any legitimate grievances with the phone company, your best bet is the Public Utilities Commission in your state. Really, they're there to protect your interests and not (at times) be very hard on the telephone company on behalf of telephone subscribers. *

What you can get for the price of a dime (which is refundable)

By David Rees

Due to the recent increase in pay phone vandalism, both Bell System and independent telephone companies have been attempting to build a better pay telephone, one which refuses to be broken into or ripped off. Some of the newer pay telephones are truly marvels of armor-plated engineering with little opportunity to acquire the coinage held within its strong box.

Even with all these anti-vandalism features pay telephones are still vulnerable to attack. There are a larger multitude of tricks which may be employed to acquire the pay telephone's service without depositing any money. For the most part, these methods require no external devices of your own, but merely the use of your hands and mouth (and sneaky brain).

Letters from the reader

Gentlemen:

I just received my first issue of TEL (Nov.) and it is with regret that I express great disappointment with the utility of its contents. The main article, concerning TSPS systems, is a reasonable explanation of the system logic involved in TSPS but I ask you, WHERE IS THE LOGIC INVOLVED?

Frankly, I resent paying for "SECRETS OF YOUR TELEPHONE" when I can get the same information FOR THE PUBLIC when I read the telephone company's PR handouts and frankly unimpressive cartoons. As you folks are also merchandising numerous devices designed to be interconnected with Bell detects foreign devices on her lines? Southern Bell on Tulsa is rapidly going BSS, and also a number of the temper-proof systems exist for detection of the tamper-proof systems telephone. While many east coast Bell systems use a sample DC current flow sensing system to detect an answered phone or lifted handset, the Tulsa system utilizes both AC and DC sensing. With low level AC detection signals covering the frequency range needed for speech, or at least so it appears, the system is designed to detect the system, and indicates the extent that Bell will detect the simple-minded "Black Box" devices which many people use to try to avoid ID billing. These

THE AUTOMATIC WIRETAP are your telephone conversations really private?

By David Auttoven

Most of us have at one time or another become impatient with a constant busy signal and made an "emergency call" to the party we desire to reach. This type of call is made through the operator only. The operator interrupts the conversation by connecting to the telephone line desired and requesting they release the line. Simple as it sounds, this action requires the operation of an entire switching system, and trunking and operator network designed specifically for emergency calls. It is called the verification system.

On most standard operator cord switchboards, a set of jacks is set aside for emergency calls. These jacks represent the terminations of "no-test" or "verification" trunks. Each operator may use these trunks for emergency calls within her office or exchange. To interrupt a given call, the operator must plug into the appropriate no-test trunk and key the telephone number of the desired party on her multifrequency keyset, preceded by KP (key pulse) and followed by ST (start). She is then connected into the conversation by central office equipment, after which she may inform the party of the emergency call.

Debugging The Buggers

By Robert Klien

In a recent article, Telephone Electronics-Line made a noble attempt to explain the basics of TSPS (Traffic Service Position System). Now, we will explore some of the lesser known phenomenon of TSPS. Specifically, we will deal with the use of verification trunking as related to TSPS.

Did you ever consider how verification is handled for in-office TSPS lines? Since there are no verification trunks that are associated or terminated directly on a TSPS type console, the TSPS operator must depend on special routing codes to perform a verification check for an "OD Condition". Left-Of-Order Condition resulting from an ROH (Receiver Out Of Hook), a CPH (Called Party Hold), or simple emergency announcement on a line in use.

THE SCRAMBLER

This special circuit, dubbed "The Garbler" or "Garb" by Pacific Telephone people, has many options and special features. As a working example, we refer to the 415 NPA (Number Plan Area), where "Garb" is now in use. When the customer requests an OD check, the TSPS operator accesses a free loop (by depressing the "ACS" key on her console) and keys "027" + "7D" - 7D being the 7-digit number to be tested. When the ST key is pressed, the Garb unit is activated, causing a special trunk to be opened to the central office in which the requested phone number is located. After the 7-digit number is keyed, the special scrambler equipment selects the line called for through a no-test circuit and connects. If the line is not in use, a recorder (120 cps) busy signal is received to indicate this condition. If the line is in use (as a result of an OD condition, conversation, etc.), the operator will hear a steady tone (dial tone), or garbled voice-range frequencies to indicate a silence, or garbled voice-range frequencies to indicate a conversation in progress. Depending on the result of the OD test, the customer will be informed either that the line requested is OD or in use.

ACTUAL VOICE VERIFICATION

If, when informed that the line is in use, the customer desires an urgent or emergency line verification, the operator follows this procedure: She re-dials through the Garb circuit, and when voice-type frequencies are received, depresses her forward-ring key. This causes the Garb equipment to drop the voice-scrambler circuit (provided on a one-way talk arrangement) and connect directly through the no-test trunk to the requested line, causing a two-way link between the requested phone line and the operator. As a security precaution, a click is produced on the line in question when it is being tested for OD, and a louder click accompanied with a marked decrease in trunk transmission qualities is produced when it is actually verified. The TSPS operator now announces the verification, and normal verification procedures are followed. When the operator releases the Garb trunk, the verified line is restored to normal operating condition, and the trunk is accordingly released from the TSPS board.

As a note on bill, when this type of verification is used, the bill operator follows the same procedure except:

A - The 3-digit access code may be depressed for a two-way verification circuit.

Already, this system, which is called the Garb system, is in widespread use in places such as 914, 415, and 213. Perhaps one of the main reasons for establishing this system is to lighten security of telephone lines. 7-digit customer verifiable verification numbers that ring into verification operators are simple to use for illegal purposes, whereas you must have specialized equipment, a particular group of trunks or tone circuits, and a specific knowledge of the access codes and special requirements of the system you are accessing to effectively use the Garb system. If you know of such information, and can add to it, then please drop us a line. Any suggestions and corrections would be greatly appreciated. When writing, please refer to the name of the article which you are questioning or commenting on, the Volume and Issue No., or date of publication. *

dime continued from page 7

Many telephone companies have had trouble with subscribers who place collect calls to pay telephones. This method of avoiding charges works only if the operator is under the impression that the pay-phone number she is calling is a subscriber type telephone. An example of such a scheme might proceed as follows. An individual on vacation in Oregon wishes to speak to a friend in Los Angeles without paying the toll charge. By placing his call person-to-person collect to his own name when calling the L.A. number, he can signal the party there that he wishes to receive a call-back. The called party, by stating that the desired party is not at home and that he will return the call when he gets back, he can usually acquire the pay-phone number from the operator. The L.A. party may then make a collect call back to the pay-phone, and the Oregon vacationer will accept this charge without having to insert money into the coin slot. This works most dependably when the fourth digit of the pay-number is not a "9" (in some areas). The operator is reassured if you answer with a business name such as "Smith Plumbing Supplies" or "Western Air Lines, Information Desk." Any phrase such as these will do, however, be certain that it does not imply a pay telephone in any way. Due to a recent increase in the number of collect calls to pay-phones, many telephone companies have initiated campaigns to remove the bells from their pay telephones.

Next month:

PHONE BOOTH SPECIAL

Try calling a long-distance number (such as directory assistance in another city) and whistling off, clearing the trunk. At precisely midnight (when everyone is calling New Year's Eve, someone's bound to jam into the trunk you're on. This will happen when you maintain a constant 2600 Hz on the trunk. When another person's trunk siezes yours, he will be charged for the call when you release the 2600 Hz.

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By Jack Kravak

Yes, it's that time of year again when we little ones and grown-ups alike prepare their Christmas gift-lists for St. Nicholas. Every December millions of people across the globe compose elaborate lists of toys, bicycles, games, all kinds of presents and everything else imaginable for friends and relatives.

cards to everyone they can think of reminding them to have a Merry Christmas. And yet, have you ever thought of giving Santa a call on the telephone? Sound absurd? Try it....

A few weeks ago, someone suggested to phone Santa Claus as a joke. I bet the operator thought it was some joke when

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415	CA	0044-0045
416	ONTARIO	1188-1187
503	OR	1000-1001
513	QUEBEC	1134-1195
515	IA	0005-0006
609	NJ	9979-9930
617	MA	9907-9908
		9933-9934
702	NV	0044-0045
714	CA	1118-1119
718	NY	9911-9912
717	PA	0098-0092
914	NY	9905-9900
		9934-9935
		9978-9979

To find such numbers, try asking directory assistance in your area for listings of resorts or large corporations with main offices you know to be nearby, but still long distance, such as DuPont Preon or a resort in Las Vegas for L.A. residents. Please send into TEL any numbers of this nature that you know or discover. Thank You.

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The verification network is by no means secure or tamper-proof. The fact is that just about anyone with the right numbers to call and the correct things to say could tap into anyone's telephone line using telephone company circuits. It has happened many times, and is usually practiced by the notorious "Phone Phreaks". The process they employ is described in the following.

Some Phone Phreaks whose capacity to sound authentic is on average do not have a Blue Box. They perform the necessary music to connect to the line they wish to tap by performing the key pulsing for the would-be switchman. They are usually not as easy as the operators are necessarily careful and are often reluctant to act in such an unfamiliar situation. In addition, the operator must be off the line when the connection is completed, otherwise she may hear some of the conversation to be tapped and suspect foul play.

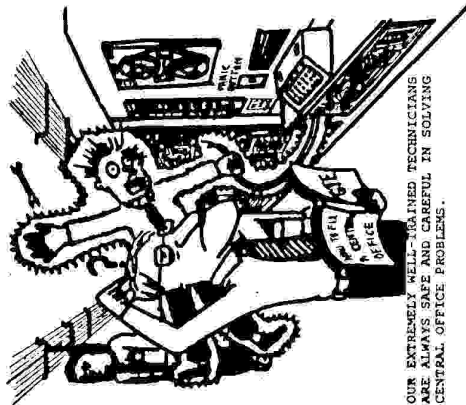
If you wish to tap lines yourself, you should know something beforehand. It is a Federal crime carrying very stiff penalties for anyone to interfere or monitor communications unless authorized to do so by the court. In some areas it holds additional penalties due to state laws forbidding it. It is not illegal, however, to dial verification yourself in order to place your own emergency calls. This can prove to be much faster than using the operator. Simply dial the words of the operator rather than just placing an emergency call. One much call it "Direct Dialecting" (see "Emergency Calls").

Telephone Electronics Line

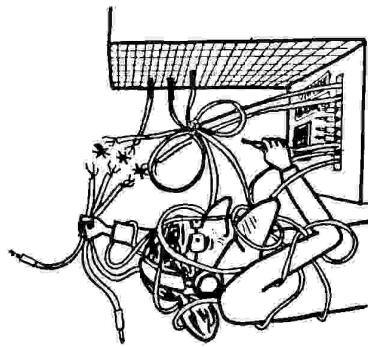
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Pathetic Telephone



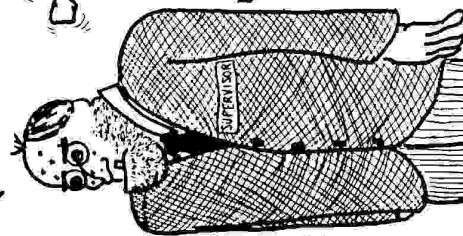
OUR EXTREMELY WELL-TRAINED TECHNICIANS ARE ALWAYS SAFE AND CAREFUL IN SOLVING CENTRAL OFFICE PROBLEMS.



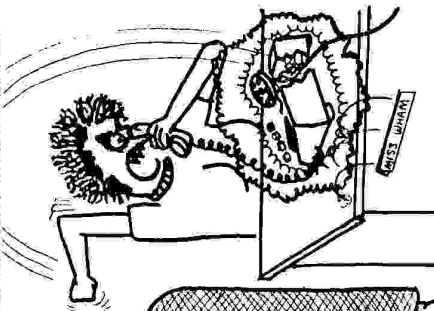
OUR OPERATORS ARE EXPERIENCED AT THEIR JOBS TO AVOID FOUL-UPS AND PROVIDE THE CUSTOMER WITH FAST, EFFICIENT SERVICE.



OUR BUSINESS OFFICE PERSONNEL KEEP NEAT AND ACCURATE RECORDS OF CALLS AND SERVICES AND ARE ALERT TO QUICKLY SOLVE YOUR PROBLEMS.



IN ADDITION, THEY ARE ALWAYS PLEASANT AND TRY TO SMILE AT ALL TIMES.



PLUS * THEY ARE COURTEOUS AND PATIENT EVEN WHEN PROBLEMS ARE COMPLEX OR ANNOYING.

David Bell

member of the **SMELL SYSTEM**

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